AMENDMENTS TO THE CLAIMS:

This listing of claims will replace all prior versions, and listings, of claims in the application:

LISTING OF CLAIMS:

1. (currently Amended) A method of synchronizing [[the]] injection with [[the]] engine phase in an engine with electronic injector control having n cylinders into which fuel is injected directly into each of the cylinders successively in a predetermined sequence, the fuel injection being synchronized with [[the]] a position of [[the]] a piston in the corresponding cylinder,

~~characterized in that it comprises~~ the method comprising the following steps, performed when the engine is started:

- ~~injection of~~ injecting fuel into m cylinders in the predetermined injection sequence when the corresponding pistons, put into motion by means of a starter, are at [[the]] an end of [[the]] a compression phase, m being determined in advance as a function of n,

- ~~measurement of the~~ measuring engine speed and/or [[its]] acceleration,

- ~~continuation of~~ continuing the injection in the predetermined sequence if the engine speed and/or [[its]]

acceleration exceed a predetermined threshold, the injection being synchronized with the engine phase in this case, and

- ~~continuation of~~ continuing the injection with a phase change with respect to the preceding injections and with respect to the predetermined sequence, this phase change being a function of n and m, so that the injection is synchronized with the engine phase, in the contrary case,

wherein the method does not employ a camshaft sensor.

2. (currently amended) The synchronization method as claimed in claim 1, characterized in that the engine speed and/or [[its]] acceleration are measured after approximately one revolution of the engine.

3. (currently amended) The synchronization method as claimed in ~~either~~ claim 1, for an engine having an even number of cylinders, ~~characterized in that~~ wherein m = n/2.

4. (currently amended) The synchronization method as claimed in claim 1, ~~characterized in that~~ wherein a second measurement of the engine speed and/or its acceleration is made after p further injections, p being determined in advance as a function of n and m, to check that the synchronization is correct.

5. (currently amended) The synchronization method as claimed in claim 4, ~~characterized in that~~ wherein the second measurement of the engine speed and/or its acceleration is made after two actual revolutions of the engine, in other words after n injections of fuel.

6. (currently amended) The synchronization method as claimed in claim 1, ~~characterized in that~~ wherein the position of the pistons in the cylinders of the engine is determined by a position sensor measuring [[the]] an angular position of [[the]] a corresponding engine flywheel.

7. (currently amended) The synchronization method as claimed in claim 1, ~~characterized in that the~~ wherein a dose of fuel injected in [[the]] a first m injections [[is]] being smaller than that used in [[the]] subsequent injections.

8. (currently amended) The synchronization method as claimed in claim 2, for an engine having an even number of cylinders, ~~characterized in that~~ wherein $m = n/2$.

9. (currently amended) The synchronization method as claimed in claim 2, ~~characterized in that~~ wherein a second measurement of the engine speed and/or its acceleration is made after p further injections, p being determined in advance as a

function of n and m, to check that the synchronization is correct.

10. (currently amended) The synchronization method as claimed in claim 3, ~~characterized in that~~ wherein a second measurement of the engine speed and/or its acceleration is made after p further injections, p being determined in advance as a function of n and m, to check that the synchronization is correct.

11. (currently amended) The synchronization method as claimed in claim 2, ~~characterized in that~~ wherein the position of the pistons in the cylinders of the engine is determined by a position sensor measuring [[the]] an angular position of [[the]] a corresponding engine flywheel.

12. (currently amended) The synchronization method as claimed in claim 3, ~~characterized in that~~ wherein the position of the pistons in the cylinders of the engine is determined by a position sensor measuring [[the]] an angular position of [[the]] a corresponding engine flywheel.

13. (currently amended) The synchronization method as claimed in claim 4, ~~characterized in that~~ wherein the position of the pistons in the cylinders of the engine is determined by a

position sensor measuring [[the]] an angular position of [[the]] a corresponding engine flywheel.

14. (currently amended) The synchronization method as claimed in claim 5, ~~characterized in that~~ wherein the position of the pistons in the cylinders of the engine is determined by a position sensor measuring [[the]] an angular position of [[the]] a corresponding engine flywheel.

15. (currently amended) The synchronization method as claimed in claim 2, ~~characterized in that the~~ wherein a dose of fuel injected in the first m injections is smaller than that used in [[the]] subsequent injections.

16. (currently amended) The synchronization method as claimed in claim 3, ~~characterized in that the~~ wherein a dose of fuel injected in the first m injections is smaller than that used in [[the]] subsequent injections.

17. (currently amended) The synchronization method as claimed in claim 4, ~~characterized in that the~~ wherein a dose of fuel injected in the first m injections is smaller than that used in [[the]] subsequent injections.

18. (currently amended) The synchronization method as claimed in claim 5, ~~characterized in that the~~ wherein a dose of fuel injected in the first m injections is smaller than that used in [[the]] subsequent injections.

19. (currently amended) The synchronization method as claimed in claim 6, ~~characterized in that the~~ wherein a dose of fuel injected in the first m injections is smaller than that used in [[the]] subsequent injections.